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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/533,197

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Gilles Lemaire

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EXAMINER

STIMPERT, PHILIP EARL

ART UNIT

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3746

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/533,197	Applicant(s) LEMAIRE ET AL.	
	Examiner Philip Stimpert	Art Unit 3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 April 2005 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/28/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 10-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Regarding claim 10, the phrase "such as," in line 1, renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

4. Further regarding claim 10, lines 7-8 recite "the motor," which is indefinite both because it refers back to the "such as clause" and because the antecedent basis within that clause ("motor *or a pump*," emphasis added) is unclear.

5. Regarding claims 11 and 17, these claims recite that the cam has "n cam lobes, n being an integer..." This limitation is indefinite as it contains scope which is inoperative, specifically the nonpositive integers. These claims will be interpreted in this action to require n to be a positive integer (excluding negative integers, and zero).

6. Regarding claim 12, line 5 recites "said face." This limitation lacks antecedent basis as recited, and as the claim recites both a communication face and a distribution face (as carried in from claim 1), the limitation is indefinite.

7. Further regarding claim 12, the term "generator lines" in line 6 is not clear, as it is not an accepted term in the art and thus does not convey any structural relationship to

those of ordinary skill. The claim will be interpreted to require that the communication orifices lie within a projection in the direction of the axis of rotation of the cylinder onto the communication face.

8. Regarding claim 18, the claim recites “a cam lobe being considered to be active when the distribution orifice associated with the rising ramp of said cam lobe is connected to the feed duct and when the distribution orifice associated with the falling ramp is connected to the discharge duct...” The use of “connected” in this recitation is unclear. Since the hydraulic mechanism is claimed significantly as a single device, one of ordinary skill would expect constant connection in some mechanical manner between all of the distribution orifices and the rest of the mechanism structure, including the feed and discharge ducts. As such, it is unclear how the “small active operating capacity in which only some of the cam lobes are active,” may be construed, given that inactive lobes would seem to require disconnection of some of the elements of the hydraulic mechanism.

9. Further regarding claim 18, the last line recites “are disposed asymmetrically.” This limitation is indefinite, as it fails to specify the nature of the asymmetry (e.g. radial or linear) as well as its frame of reference (e.g. with respect to the axis of rotation or some other reference frame).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Martin et al. (US 6,347,572) in view of Gesell (3,141,309).

12. Regarding claim 10, Martin et al. teach a hydraulic motor comprising a cam (4A, 4B) and a cylinder block (6) suitable for rotating relative to each other about an axis of rotation (10), the cylinder block (6) having a plurality of cylinders (12A, 12B) connected via cylinder ducts (15A, 15B) to communication orifices (at 42B in Fig. 1) disposed in a communication face (30) of the cylinder block (6), pistons (14A, 14B) slidably mounted in the cylinders (12A, 12B) for cooperating with the cam (4A, 4B), the motor further comprising a fluid distributor (16) constrained in rotation (by 17) with the cam (4A, 4B) about the axis of rotation (10), and having a distribution face (28) which is provided with distribution orifices (42B) comprising orifices suitable for being connected to a feed duct (either of 24 or 26, depending on mode of operation) and orifices suitable for being connected to a discharge duct (the other of 24 or 26), the distribution face (28) and the communication face (30) facing each other so as to put the communication and distribution orifices into sequential respective communication during rotation of the cylinder block (6) relative to the distributor. Martin et al. also teach a series of grooves (20, 21, 22) the first and last of which are permanently associated with the feed/discharge ducts (24 with 20, 26 with 22), the grooves being provided so as to allow a selection of operating capacity of the hydraulic mechanism (col. 7, ln. 30-39). Martin et al. do not teach that any given cylinder (12A, 12B) fluidly communicates with more than one communication orifice (42A). Gesell teaches an air conditioning apparatus

having radially oriented, cam driven pistons. In particular, Gesell teaches that each cylinder (27) has two communication ducts (31, 32) ending in communication orifices (at the interface with the manifold plate 20 or 100). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the hydraulic motor of Martin et al. with the multiple communication orifices taught by Gesell in order to bring the cylinders into communication with more than one of the capacity adjusting grooves of Martin et al. According to this combination, both of the communication orifices of a given cylinder would communicate with one of the feed duct and the discharge duct, according to the setting of the capacity valve shown in Fig. 7, as simultaneous communication with both the feed and discharge ducts would be useless. Further, the communication orifices of Gesell are spaced apart radially, and arranged angularly so as to allow the communication described above (essentially, the orifices have an angular spacing of zero).

13. Regarding claim 12, the communication orifices as taught by Gesell lie within a projection in the direction of the axis of rotation of the cylinder onto the communication face (as shown in Fig. 3).

14. Regarding claim 13, Gesell teaches that the communication orifices are both disposed on the axis of the cylinder as shown in Fig. 3, and thus are symmetric with respect thereto.

15. Regarding claim 14, Gesell teaches that both of the communication orifices are disposed intersecting a plane defined by the axis of the cylinder with which they communicate and the axis of rotation.

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16. Regarding claim 15, Gesell teaches that all cylinders are connected to two communication orifices (31, 32), and it would be obvious to provide those orifices to all of the cylinders of Martin et al. in the combination to obtain the full effect of the combination.

17. Regarding claim 16, Gesell teaches that the angular spacing, namely zero degrees, between the two communication orifices of a given cylinder is the same for all cylinders.

18. Regarding claim 18, Martin et al. teach that the cam has a plurality of cam lobes (col. 14, ln. 21) which one of ordinary skill in the art would assume to have a rising ramp and a falling ramp. Further, Martin et al. teach that each lobe is associated with a respective distribution orifice (42B, see col. 13 ln. 66 through col. 14, ln. 9). Finally, Martin et al. teach that the hydraulic mechanism has varying active operating capacities (see col. 13 ln. 66 through col. 14, ln. 28). In light of the indefiniteness of this claim as discussed above, it is assumed that the limitations of the claim have been met by the present combination.

Allowable Subject Matter

19. Claims 11 and 17 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

20. The following is a statement of reasons for the indication of allowable subject matter: the limitation of non-zero angular spacing between cylinder communication

orifices believed to be required by these claims in combination with the remaining limitations of these claims and their parent claims is not shown in the prior art of record.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Stimpert whose telephone number is (571)270-1890. The examiner can normally be reached on Mon-Fri 7:30AM-4:00PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on (571) 272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devon C Kramer/
Supervisory Patent Examiner, Art
Unit 3683

/Philip Stimpert/
Examiner, Art Unit 3746
31 March 2008